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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/022,791

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Qicai Shi

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24273

7590

04/01/2005

MOTOROLA, INC
INTELLECTUAL PROPERTY SECTION
LAW DEPT
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EXAMINER

FLANAGAN, KRISTA M

ART UNIT

PAPER NUMBER

2631

DATE MAILED: 04/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/022,791

Applicant(s)

SHI ET AL.

Examiner

Krista M. Flanagan

Art Unit

2631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16-26 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 7, 13 and 14 is/are rejected.
- 7) ☒ Claim(s) 3-6, 8-12, and 15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 December 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: "108". Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The abstract of the disclosure is objected to because it refers to purported merits or speculative applications of the invention. Correction is required. See MPEP § 608.01(b).
3. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

Claim Objections

4. Claims 1 and 7 are objected to because of the following informalities:
 - a. Regarding claim 1, it is believed that the word “of” is missing from the end of line 11.
 - b. Regarding claim 7, it is believed that the word “of” is missing from the statement “into a second sequence data samples”.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an

international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claims 1, 2, 7, 13 and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Hctor et al., US Patent Application No. 2003/0069025 A1.

7. Regarding claim 1, Hctor discloses a method for receiving a CDMA signal having in-phase and quadrature component waveforms (See page 4, paragraph 0038) each modulated by a pseudo-noise code of length M chips so that M chips (See page 4, paragraph 0037), with each chip of the M chips having one or more data samples that are each comprised of one or more quantized bits, represent one information bit, said method comprising: converting said in-phase component waveform into a first sequence of data samples (See page 4, paragraph 0038); converting said quadrature component waveform into a second sequence of data samples (See page 4, paragraph 0038); selecting one or more data samples of each of the M chips and one or more quantized bits from each selected data sample from the first or second sequence of data samples to obtain a data sequence (See page 4, paragraph 0037) ; processing said data sequence to determine if a signal is present in the DS-CDMA signal (See page 4, paragraph 0041); and if a signal is present: collecting a predetermined number of samples from said first and second sequences of data samples; and decoding a predetermined number of samples from said first and second sequences of data samples to recover information from the DS-CDMA signal (See figure 5, block 134 and page 5, paragraph 0049).

8. Regarding claim 2, which inherits all of the limitations of claim 1, Hctor discloses a method for receiving wherein said processing said data sequence to determine if a signal is

Art Unit: 2631

present comprises: coherently averaging said data sequence over one or more information bits to obtain an averaged data sequence of length M chips (See page 5, paragraph 0048); correlating said averaged data sequence with a pseudo-noise code sequence of length M to obtain a correlation output (See page 5, paragraph 0049); and comparing said correlation output with a predetermined threshold level to determine if a signal is present in the DS-CDMA signal (See page 5, paragraph 0049).

9. Regarding claim 7, which inherits all of the limitations of claim 1, Hctor discloses a method for receiving wherein said converting said in-phase component waveform into a first sequence of data samples and said converting said quadrature component waveform into a second sequence of data samples are performed by first and second analog-to-digital converters (See figure 5, block 133).

10. Regarding claim 13, which inherits all of the limitations of claim 1, Hctor discloses a method for receiving wherein said processing said data sequence to determine is a signal is present in the DS-CDMA signal and said decoding a predetermined number of samples from said first and second sequences of data samples to recover information from the DS-CDMA signal is performed on a digital signal processor (See figure 5, block 134 and page 5, paragraph 0049).

11. Regarding claim 14, which inherits all of the limitations of claim 1, Hctor discloses a method for receiving wherein said decoding comprises: correlating said predetermined number of samples from said first and second sequences of data samples with a pseudo-noise sequence to obtain a plurality of correlation values; and determining the information in the DS-CDMA signal from said plurality of correlation values (See page 5, paragraph 0049).

Allowable Subject Matter

12. Claims 16-26 are allowed.

13. The following is an examiner's statement of reasons for allowance: Prior art does not disclose a method or a device as claimed where there is a data sequence retrieved from said first memory that is then processed to determine if a signal is present in the DS-CDMA signal; and if a signal is present: causing a predetermined number of samples of the DS-CDMA signal to be stored in a second memory; retrieving said predetermined number of samples of the sampled DS-CDMA signal from said second memory; and decoding said predetermined number of samples of the sampled DS-CDMA signal to recover information from the sampled DS-CDMA signal.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

14. Claims 3-6, 8-12, and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Haugli et al. discloses a wireless packet data distributed communications system in US Patent No. 5,991,279.

Art Unit: 2631

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krista M. Flanagan whose telephone number is (571) 272-2203. The examiner can normally be reached on Monday - Friday, 8 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad H. Ghayour can be reached on (571) 272-3021. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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A handwritten signature in black ink, enclosed within a large, loopy oval. The signature appears to be 'Krista M. Flanagan'.